

CLAIMS

What is claimed is:

1. An air compressor assembly, comprising:
an air tank for containing air at an elevated pressure, the air tank having an air inlet port and an air outlet port therein;
an air compressor for supplying air for storage in the air tank through a first tubing, the first tubing connecting the air inlet port to the air compressor; and
a second tubing connecting the air outlet port to a manifold assembly;
wherein compressed air in the air tank is discharged through the air outlet port, the second tubing, and the manifold assembly during air usage.
2. The air compressor assembly of claim 1, wherein the air compressor assembly is of a portable type.
3. The air compressor assembly of claim 2, wherein the portable air compressor assembly is enclosed in a shroud.
4. The air compressor assembly of claim 3, wherein the shroud is made of plastic.
5. The air compressor assembly of claim 3, wherein the shroud includes a handle to allow the portable air compressor assembly to be lifted and transported from place to place.

6. The air compressor assembly of claim 3, further comprises a control panel to allow operation of the portable air compressor assembly to be controlled.
7. The air compressor assembly of claim 1, wherein the air compressor assembly is of a "pancake" type.
8. The air compressor assembly of claim 1, wherein the air compressor assembly is of a "hot-dog" type.
9. The air compressor assembly of claim 1, wherein the air compressor assembly is of a vertical "hot-dog" type.
10. The air compressor assembly of claim 1, wherein the air compressor assembly is of a "double hot-dog" type.
11. The air compressor assembly of claim 1, wherein the air compressor assembly is of a vertical stationary type.
12. The air compressor assembly of claim 1, wherein the air outlet port is positioned at a bottom wall of the air tank.
13. The air compressor assembly of claim 1, wherein the air inlet port is positioned at a top wall of the air tank.
14. The air compressor assembly of claim 1, wherein the air inlet port includes a check valve for preventing air from flowing from the air tank to the air compressor.

15. An air compressor assembly, comprising:
 - an air tank for containing air at an elevated pressure, the air tank having an air access port therein;
 - an air compressor for supplying air for storage in the air tank;
 - a first tubing connecting the air compressor to a manifold assembly; and
 - a second tubing connecting the manifold assembly to the air access port;wherein compressed air in the air tank is discharged through the air access port, the second tubing, and the manifold assembly during air usage.
16. The air compressor assembly of claim 15, wherein the air compressor assembly is of a portable type.
17. The air compressor assembly of claim 16, wherein the portable air compressor assembly is enclosed in a shroud.
18. The air compressor assembly of claim 17, wherein the shroud is made of plastic.
19. The air compressor assembly of claim 17, wherein the shroud includes a handle to allow the portable air compressor assembly to be lifted and transported from place to place.
20. The air compressor assembly of claim 17, further comprises a control panel to allow operation of the portable air compressor assembly to be controlled.
21. The air compressor assembly of claim 15, wherein the air compressor assembly is of a "pancake" type.

22. The air compressor assembly of claim 15, wherein the air compressor assembly is of a "hot-dog" type.
23. The air compressor assembly of claim 15, wherein the air compressor assembly is of a vertical "hot-dog" type.
24. The air compressor assembly of claim 15, wherein the air compressor assembly is of a "double hot-dog" type.
25. The air compressor assembly of claim 15, wherein the air compressor assembly is of a vertical stationary type.
26. The air compressor assembly of claim 15, wherein the air access port is positioned at a bottom wall of the air tank.
27. The air compressor assembly of claim 15, wherein the manifold assembly includes a check valve for preventing air from flowing from the manifold assembly to the air compressor.

28. An air compressor assembly, comprising:
an air tank for containing air at an elevated pressure having an air access port thereof, the air access port being an open end of a centrally hollow conduit positioned inside the air tank;
an air compressor for supplying air for storage in the air tank;
a first tubing connecting the air compressor to a manifold assembly; and
a second tubing connecting the manifold assembly to the air access port;
wherein compressed air in the air tank is discharged through the conduit, the air access port, the second tubing, and the manifold assembly during air usage.
29. The air compressor assembly of claim 28, wherein the air compressor assembly is of a portable type.
30. The air compressor assembly of claim 29, wherein the portable air compressor assembly is enclosed in a shroud.
31. The air compressor assembly of claim 30, wherein the shroud is made of plastic.
32. The air compressor assembly of claim 30, wherein the shroud includes a handle to allow the portable air compressor assembly to be lifted and transported from place to place.
33. The air compressor assembly of claim 30, further comprises a control panel to allow operation of the portable air compressor assembly to be controlled.

34. The air compressor assembly of claim 28, wherein the air compressor assembly is of a "pancake" type.
35. The air compressor assembly of claim 28, wherein the air compressor assembly is of a "hot-dog" type.
36. The air compressor assembly of claim 28, wherein the air compressor assembly is of a vertical "hot-dog" type.
37. The air compressor assembly of claim 28, wherein the air compressor assembly is of a "double hot-dog" type.
38. The air compressor assembly of claim 28, wherein the air compressor assembly is of a vertical stationary type.
39. The air compressor assembly of claim 28, wherein the air access port is positioned at a top wall of the air tank.
40. The air compressor assembly of claim 28, wherein the manifold assembly includes a check valve for preventing air from flowing from the manifold assembly to the air compressor.

41. A method for discharging condensate within an air tank of an air compressor assembly, comprising:
supplying an air tank for storing air at an elevated pressure; and
discharging condensate within the air tank into compressed air being released from the air tank during air usage.
42. The method of claim 41, further comprising routing discharged condensate and compressed air through air outlet tubing to an air powered tool.
43. The method of claim 42, wherein the discharging step is performed so that the condensate is discharged in small amounts not harmful to the air powered tool.